

United States Patent and Trademark Office

WHI

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,868	12/30/2004	Norbert Lobig	2002P10502WOUS	9286
Siemens Corpo	7590 11/16/2007	EXAMINER .		
Intellectual Property Department			TRAN, TUNG Q	
170 Wood Avenue South Iselin, NJ 08830			ART UNIT	PAPER NUMBER
,			2616	
	•			
			MAIL DATE	DELIVERY MODE
	•		11/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	Application No.	Applicant(s)			
	10/519,868	LOBIG, NORBERT			
Office Action Summary	Examiner	Art Unit			
	Tung Q. Tran	2616			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,					
 WHICHEVER IS LONGER, FROM THE MAILING DA Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). 	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirn vill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	1) Responsive to communication(s) filed on				
,	·				
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-40</u> is/are pending in the application.					
4a) Of the above claim(s) <u>1-21</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>22-40</u> is/are rejected.					
7) Claim(s) is/are objected to.		•			
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examine	er. •				
10)⊠ The drawing(s) filed on 30 December 2004 is/a	ire: a)⊠ accepted or b)⊡ object	ted to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:					
1.⊠ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/30/2004. 	5) Notice of Informal F				

10/519,868 Art Unit: 2616

DETAILED ACTION

Preliminary Amendment

1. The Preliminary Amendment filed on 12/30/2004 which cancels claims 1-21 has been acknowledged.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 33-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 33, "a resource server" is recited twice (line 1 and 7). Therefore, it is indefinite to determine which resource server among the two is claimed after line 7.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10/519,868 Art Unit: 2616

5. Claims 22-26, 28-35, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hefel et al. (US 5,563,875) in view of Smith et al. (USPGPub 2002/0159393).

Hefel discloses wrap-around route testing in packet communication networks comprising the following features.

Regarding claim 22, a method for checking a transmission quality (see "route testing system" recited in the Abstract) between a first node (Fig. 4, Node 41) and a second node (Fig. 4, Node 42) in a packet network which is effectively connected to at least one packet-based switching system (Fig. 1), the method comprising: performing first method steps (Fig. 4), comprising: setting up a connection (Fig. 4, wrap-around message 44) between a resource server (Fig. 4, Node 40; Fig. 3) and the first node (Fig. 4, Node 41) by the packet-based switching system (Fig. 1); transmitting test information via the connection to the first node from the resource server; looping back the test information in the first node; transmitting back the looped-back test information to the resource server (Fig. 4, wrap-around message 44); and evaluating the loopedback test information with regard to criteria relating to the transmission quality (see how to examine the message 44 recited in col. 5, line 66 continues to col. 6, line 5); performing second method steps (Fig. 4), comprising: setting up a connection (Fig. 4, wrap-around message 45) between the resource server (Fig. 4, Node 40; Fig. 3) and the second node (Fig. 4, Node 42) by the packet-based switching system (Fig. 1); transmitting test information via the connection to the second gateway from the resource server; looping back the test information in the second node; transmitting back 10/519,868 Art Unit: 2616

the looped-back test information to the resource server (Fig. 4, wrap-around message 45); and evaluating the looped-back test information with regard to criteria relating to the transmission quality (see how to examine the message 45 recited in col. 6, line 17-37).

Regarding claim 23, wherein the direction function and/or responder function are provided on director or responder modules arranged in the resource server (Fig. 4, Node 40; Fig. 3).

Regarding claim 24, wherein the test information is evaluated in the resource server or in the packet-based switch (Fig. 1, Fig. 4, Node 40; Fig. 3).

Regarding claim 25, wherein a test report is created (see resulting test stored and displayed recited in col. 5, lines 30-35).

Regarding claim 34, further comprising an interface to a test station (Fig. 3, Workstation 38).

Regarding claim 35, further comprising mechanisms for evaluating results of transmission quality checks (Fig. 3; and (see how to examine the message 44 recited in col. 5, line 66 continues to col. 6, line 5; and see how to examine the message 45 recited in col. 6, line 17-37).

Hefel does not discloses the following features: regarding claim 22, first gateway and second gateway; and performing third method steps, comprising: transmitting test information from a director function arranged in the resource server via the first gateway and the second gateway to a responder function arranged in the resource server by setting up a connection between the resource server and the first gateway by the packet-based switching system, and by setting up a connection between the first

10/519,868

Art Unit: 2616

gateway and the second gateway by the packet-based switching system, and by setting up a connection between the second gateway and the resource server by the packetbased switching system; transmitting test information via the connections set up from the resource server to the first gateway, from the first gateway to the second gateway and from the second gateway to the resource server; and evaluating the test information received with regard to criteria relating to the transmission quality; and combining the results of the first, second, and third method steps for checking the transmission quality on the transmission section between the first gateway and the second gateway; regarding claim 26, wherein a bidirectional connection is established between the resource server and one of the gateways; regarding claim 38, wherein the gateway is designed as a media gateway, an access gateway or a residential gateway; regarding claim 39, wherein the loopback functionality is implemented with the aid of separately addressable virtual ports used exclusively for test purposes; regarding claim 40, wherein the loopback functionality is implemented with the aid of a TDM (time division multiplexer) loop.

Smith discloses loop back testing for multi-protocol hybrid networks comprising the following features.

Regarding claim 22, a method for checking a transmission quality (see the Abstract) between a first gateway (Fig. 1, Gateway 106) and a second gateway (Fig. 1, Gateway 110) in a packet network which is effectively connected to at least one packet-based switching system (Fig. 1), the method comprising: performing method steps (Fig. 1), comprising: transmitting test information (see "a loop back message" recited in para.

10/519,868

Art Unit: 2616

[0015], page 2) from a director function arranged in the resource server (Fig. 1, Switch 102; Fig. 2, 1st network element) via the first gateway (Fig. 1, Gateway 106) and the second gateway (Fig. 1, Gateway 110) to a responder function arranged in the resource server (Fig. 1, Switch 102; Fig. 2, 1st network element) by setting up a connection between the resource server (Fig. 1, Switch 102) and the first gateway (Fig. 1, Gateway 106) by the packet-based switching system (Fig. 1), and by setting up a connection between the first gateway (Fig. 1, Gateway 106) and the second gateway (Fig. 1. Gateway 110) by the packet-based switching system (Fig. 1), and by setting up a connection between the second gateway (Fig. 1, Gateway 106) and the resource server (Fig. 1, Switch 102) by the packet-based switching system (Fig. 1); transmitting test information via the connections set up from the resource server to the first gateway, from the first gateway to the second gateway and from the second gateway to the resource server; and evaluating the test information received with regard to criteria relating to the transmission quality (Fig. 2, see examining the loop back test message in steps 214-216); and performing other method steps (Fig. 1), comprising: setting up a connection between a resource server (Fig. 1, Switch 102; Fig. 2, 1st Network Element) and the first gateway (Fig. 1, Gateway 106) by the packet-based switching system (Fig. 1): transmitting test information (see "a loop back test message" recited in para. [0020], page 3) via the connection to the first gateway from the resource server; looping back the test information in the first gateway; transmitting back the looped-back test information to the resource server; and evaluating the looped-back test information with regard to criteria relating to the transmission quality (see how a loop back test message

10/519,868 Art Unit: 2616

is sent from the Switch 102 to the Gateway 106 and it returns backs to the Switch 102 for examining recited in para. [0020], page 3); and performing more other method steps as previous steps for other gateways if needed (see "this process preferably continues until a problem is found and isolated" recited in para. [0020], page 3); and combining the results of all method steps for checking the transmission quality on the transmission section between the first gateway and the second gateway (see how to combine all loop back tests to check integrity and quality of the paths in the system recited in para. [0020], page 3).

Regarding claim 26, wherein a bidirectional connection is established between the resource server and one of the gateways (Fig. 1).

Regarding claim 38, wherein the gateway is designed as a media gateway, an access gateway or a residential gateway (Fig. 1, Gateways 106, 110, 126; and see iMerge gateways recited in para. [0014], page 2).

Regarding claim 39, wherein the loopback functionality is implemented with the aid of separately addressable virtual ports used exclusively for test purposes (Fig. 2, "adding identifier" in steps 204 and steps 210 and "verify identifiers" in steps 214).

Regarding claim 40, wherein the loopback functionality is implemented with the aid of a TDM (time division multiplexer) loop (see "time division multiplex" recited in para. [0012], page 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hefel by using features, as taught by Smith, in order to identify problems in transmission of the communication network efficiently.

10/519,868 Art Unit: 2616

Regarding claims 28-33, and 37, they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 22-26 since claims 28-33, and 37 disclose method and apparatuses that accomplish the method of claims 22-26.

6. Claims 27and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Hefel et al. (US 5,563,875) in view of Smith et al. (USPGPub 2002/0159393) and further in view of Chong (US 6,738,353).

Hefel and Smith disclose the claimed limitations in paragraph 5 above.

Hefel also discloses the following features.

Regarding claim 36, wherein voice quality is evaluated by the resource server (Fig. 4, Node 40; Fig. 3).

Hefel and Smith do not disclose the following features: regarding claims 27 and 36, wherein voice quality is evaluated in accordance with the ITU-T Standards P.861 or P.862.

Chong discloses a system and method for monitoring a packet network comprising the following features.

Regarding claims 27 and 36, wherein voice quality is evaluated in accordance with the ITU-T Standards P.861 or P.862 (see "P.861" recited in col. 1, line 63 continues to col. 2, lines 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Hefel and Smith by using features, as taught by Chong, in order to determine the quality of signal transmissions in a packetized network (Chong: col. 2, lines 30-33).

10/519,868 Art Unit: 2616

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Q. Tran whose telephone number is (571) 272-9737. The examiner can normally be reached on Mon-Fri: 7:30 am - 5 pm, off alternative Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TQT

KWANG BIN YAO SUPERVISORY PATENT EXAMINER